specification at, for example, figures 3 and 4. Added claim 25 recites that the article is made out of plastics material. Support for added claim 25 is found in the specification at, for example, page 1, lines 3-5.

No new matter is added.

The attached Appendix includes a marked-up copy of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

I. Rejection Under 35 U.S.C. §102(b)

Claims 1, 2, 4-9, 13-15, 19 and 20 were rejected by the Patent Office under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 4,294,641 to Reed et al. (hereinafter "Reed"). The rejection is respectfully traversed.

Reed fails to anticipate the present invention because Reed fails to describe, either explicitly or implicitly, each and every aspect of the claimed invention. Instead, Reed describes a heat transfer for printing textiles.

Claim 1 of the present application recites a hot marking method enabling decoration to be made on an article, which method includes "causing the layer of varnish that has been transferred onto the article to harden by exposing it to said radiation." (Emphasis added).

Reed explicitly excludes transfer in the solid state in which the transfer layer is retained as a coherent film during heat transfer as recited in the present invention.

In particular, Applicant points out that Reed teaches that "[t]he liquid phase transfer of the present invention therefore, excludes transfer in the solid state in which the transfer layer is retained as a coherent film during heat transfer and would produce a decorated substrate in which the transfer layer exists as a film or skin on the surface of the substrate. Such solid state transfer involves retention of a coherent film layer after transfer and materially alters the physical properties of the substrate such as porosity and surface texture and produces a label like effect." (See column 3, lines 46-55) (Emphasis added).

In other words, in Reed, the transfer layer should not be hardened as otherwise it would remain coherent.

Reed further teaches that the transfer layer may be photopolymerized and cross-linked by ultraviolet radiation in order to render the transfer non-softenable by heat and increase wash-fastness and dry-clean resistance. (See column 14, lines 44-55). However, photopolymerizing and cross-linking do not necessarily imply hardening.

In contrast to Reed, claim 1 of the present application recites a hot marking method wherein the layer of varnish is hardened by exposing it to radiation.

Further, independent claims 14 and 15 recite a multilayer structure "comprising a layer of varnish that hardens under an effect of radiation ...." (Emphasis added).

Thus, as with claim 1, Reed fails to anticipate independent claims 14 and 15 because Reed explicitly excludes such transfer in the solid state.

Further, claim 20 recites "an article having decoration applied thereto by a hot marking method as defined in claim 1."

Thus, the article of the present invention comprises a hardened varnish layer, which, as set forth above, is not taught or suggested in Reed.

Thus, for the foregoing reasons, Applicant submits that Reed fails to anticipate the present invention. Reconsideration and withdrawal of the rejection are respectfully traversed.

II. Rejections Under 35 U.S.C. §103(a)

A. Claims 11 and 21

Claims 11 and 21 were rejected by the Patent Office under 35 U.S.C. §103(a) as allegedly being obvious over Reed. The rejection is respectfully traversed.

Claims 11 and 21 are dependent upon claim 1. Thus, claims 11 and 21 include all of the limitations of claim 1.

As set forth above, Reed fails to teach or suggest "causing the layer of varnish that has been transferred onto the article to harden it by exposing it to said radiation" as recited in claim 1.

Thus, as Reed fails to teach or suggest claim 1, Reed fails to teach or suggest the subject matter of dependent claims 11 and 21. Reconsideration and withdrawal of the rejection are respectfully requested.

B. Claim 3

Claim 3 was rejected by the Patent Office under 35 U.S.C. §103(a) as allegedly being obvious over Reed in view of U.S. Patent No. 5,581,978 to Hekal et al. (hereinafter "Hekal"). The rejection is respectfully traversed.

Claim 3 is dependent upon claim 1. Thus, claim 3 includes all of the limitations of claim 1.

As set forth above, Reed fails to teach or suggest "causing the layer of varnish that has been transferred onto the article to harden it by exposing it to said radiation" as recited in claim 1 of the present application.

Thus, as Reed fails to teach or suggest claim 1, Reed fails to teach or suggest the subject matter of dependent claim 3.

Further, by admission of the Patent Office, Reed fails to teach or suggest that the UV or thermally curable resin is based on a cationic system.

Hekal fails to remedy the deficiencies of Reed. Hekal was merely relied upon by the Patent Office as allegedly teaching materials that work well for UV curable overcoatings including acrylated urethanes, two part epoxy and urethane systems and cationic systems.

However, nowhere does Hekal teach or suggest "causing the layer of varnish that has been transferred onto the article to harden it by exposing it to said radiation" as recited in claim 1 of the present application.

Thus, for the foregoing reasons, Applicant submits that Reed and Hekal, whether taken singly or in combination, fail to teach or suggest the present invention. Reconsideration and withdrawal of the rejection are respectfully requested.

C. Claim 22

Claim 22 was rejected by the Patent Office under 35 U.S.C. §103(a) as allegedly being obvious over Reed in view of U.S. Patent No. 4,133,723 to Howard (hereinafter "Howard"). The rejection is respectfully traversed.

Claim 22 is dependent upon claim 1. Thus, claim 22 includes all of the limitations of claim 1.

As set forth above, Reed fails to teach or suggest "causing the layer of varnish that has been transferred onto the article to harden it by exposing it to said radiation" as recited in claim 1.

Thus, as Reed fails to teach or suggest claim 1, Reed fails to teach or suggest the subject matter of dependent claim 22.

Further, by admission of the Patent Office, Reed does not teach or suggest a low molecular weight oligomer such as a UV or thermally curable acrylated polyurethane having molecular weights in the range from 800 to about 2000 as recited in claim 22 of the present application.

Howard fails to remedy the deficiencies of Reed. Reed was merely relied upon by the Patent Office as allegedly teaching that acrylated urethane oligomers having molecular weights ranging from 410 to 1000 are useful in forming radiation curable coatings.

However, nowhere does Howard teach or suggest "causing the layer of varnish that has been transferred onto the article to harden it by exposing it to said radiation" as recited in claim 1 of the present application.

Thus, for the foregoing reasons, Applicant submits that Reed and Howard, whether taken singly or in combination, fail to teach or suggest the present invention. Reconsideration and withdrawal of the rejection are respectfully requested.

D. Claims 10, 12 and 16-18

Claims 10, 12 and 16-18 were rejected by the Patent Office under 35 U.S.C. §103(a) as allegedly being obvious over Reed in view of U.S. Patent No. 6,059,914 to Süss (hereinafter "Süss") and U.S. Patent No. 4,215,170 to Vilaprinyo Oliva (hereinafter "Vilaprinyo Oliva"). The rejection is respectfully traversed.

Claims 10, 12 are dependent upon claim 1. Claims 16-18 are dependent upon claim 15.

As set forth above, Reed fails to teach or suggest "causing the layer of varnish that has been transferred onto the article to harden it by exposing it to said radiation" as recited in claim 1 and/or a multilayer structure "comprising a layer of varnish that hardens under an effect of radiation" as recited in claim 15.

Thus, as Reed fails to teach or suggest claims 1 and 15, Reed fails to teach or suggest the subject matter of dependent claim 10, 12 and 16-18.

Further, by admission of the Patent Office, Reed does not teach or suggest that the design layer is covered with a layer of hot-melt adhesive as recited in claims 10 and 16, or that the design layer comprises a layer of vacuum deposited metal as recited in claims 12 and 18.

Süss fails to remedy the deficiencies of Reed. Süss was merely relied upon by the Patent Office as allegedly teaching substituting metal layers for pigmented color layers and to utilize a layer of hot-melt adhesive thereover where the design layer does not have suitable adhesive properties.

However, Süss also fails to teach or suggest "causing the layer of varnish that has been transferred onto the article to harden it by exposing it to said radiation" as recited in claim 1 and/or a multilayer structure "comprising a layer of varnish that hardens under an effect of radiation" as recited in claim 15.

Further, by admission of the Patent Office, Süss fails to teach or suggest the manner in which the metal design layer is formed.

Vilaprinyo Oliva fails to remedy the deficiencies of Reed and Süss. Vilaprinyo Oliva was merely relied upon by the Patent Office as allegedly teaching that vacuum metalization is a known process for forming a metallized layer on multiplayer transfer structures.

However, like Reed and Süss, Vilaprinyo Oliva fails to teach or suggest "causing the layer of varnish that has been transferred onto the article to harden it by exposing it to said radiation" as recited in claim 1 and/or a multilayer structure "comprising a layer of varnish that hardens under an effect of radiation" as recited in claim 15.

Thus, for the foregoing reasons, Applicant submits that Reed, Süss and Vilaprinyo Oliva, whether taken singly or in combination, fail to teach or suggest the present invention. Reconsideration and withdrawal of the rejection are respectfully requested.

III. Conclusion

In view of the foregoing amendments and remarks, Applicant submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-25 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,

William P. Berridge
Registration No. 30,024

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WPB:DML/rxg

Attachment:
Appendix

Date: August 12, 2002

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION
Please grant any extension necessary for entry;
Charge any fee due to our Deposit Account No. 15-0461

APPENDIX

Changes to Claims:

Claims 23-25 are added.

The following is a marked-up version of the amended claims:

1/ (Amended) A hot marking method enabling decoration to be made on an article, comprising ~~the steps of~~:

· supplying a multilayer structure comprising a layer of varnish that hardens under the effect of radiation, a backing layer, and a layer of decoration, the varnish layer being situated between the backing layer and the decoration layer;

· bringing said multilayer structure into contact with the article;

· applying pressure and heat to the backing layer at a location where it is desired to transfer the decoration layer onto the article, the varnish layer being transferred locally onto the article together with the decoration layer;

· withdrawing the backing layer; and

· causing the layer of varnish that has been transferred onto the article to harden by exposing it to said radiation.

7/ (Amended) A method according to claim 1, wherein the varnish includes at least one ~~or more pigments~~ of a pigment or ~~dyes~~ a dye.

9/ (Amended) A method according to claim 1, wherein the backing layer ~~is comprised by~~ comprises a polyester film.

14/ (Amended) A multilayer structure ~~for implementing the method as defined in claim 1~~ comprising a layer of varnish that hardens under an effect of radiation, a backing layer, and a layer of decoration, the varnish layer being situated between the backing layer and the decoration layer.